

WILL AND CONSCIENCE

BY DR. CHARLES PLATT

LIFE has been traced through the species from the single cell to a complex of cells, to the elaborated organism, and centralization of the sense functions has been found to proceed *pari passu* with this body growth. The diffused sensibility of the simpler forms becomes specialized into a central nervous system, and, ultimately, with the formation of a brain, the "sensations" become correlated into "sense." One species, with a brain so sufficient to itself that it seems something apart from the rest of the body—a relationship which, I believe, gives "consciousness"—and with a complexity which has brought in the seeming possibility of choice—this one species is Man.

There are no breaks in the process of evolution; it is continuous, with steps that are almost imperceptible, from the single immortal cell of opening life to the complex mortal man. Just where in this series did the Will enter in? The term connotes volitional action, but the beginnings of Will must have long antedated its conscious expression.

And consider the individual. There is here, too, the same steady increase in elaboration. When the spermatozoon fuses with the nucleus of the ovum, the individual is complete. In this tiny, now fertilized, cell are all the inheritances, mental and otherwise, of the parents and of the race, and all the possibilities and potentialities of the man to be. The Will is here just as surely as may be a long nose or a pair of brown eyes. When the male and female elements unite, then begins the Will's first manifestation, the will of the ovum to grow and to multiply and to modify. Is, then, the Will inherent in the spermatozoon? It might seem so—but if we prick with the point of a dissecting needle the unfertilized egg of a frog, this egg, too, will grow and become ultimately a normal frog. Do not these facts at least suggest the truth of that scientific conception which interprets the will-to-grow as but a matter of appropriate stimulation, and the conscious will as but an elaboration of the primitive?

Let us take the question only on its higher plane, that of the choice effected in consciousness; and let us consider it from the standpoint of the physiological hypothesis of brain and nerve patterns.

When a "nerve force flows" over a given path, it brings about changes in the cells involved, changes which render a second passage more easy. And each time the nerve current flows, it cuts, as it were, a deeper channel, until, finally, a definite path is produced, a path to be departed from only with difficulty—a habit has been formed. In the brain, certain cells, having been once connected during the registering of some experience, tend to again connect when any of the group happens later to be stimulated. 'An odor, a sound, a taste, a word, may recall—revive—some picture, some complex of patterns, laid down, it may be, long in the past. The brain pattern, this group of cells acting in common is like a set-piece of fireworks, requiring but a spark to any one of its parts for the whole to be thrown into action. Here is the machinery of memory—what bearing has this on volition and choice?

The solution of any problem, according to this pattern conception, must lead by association to a great variety of more or less related cell groups—but many of these will contain along with the associated elements others which are truly antagonistic, and the solution of the problem becomes, therefore, a process of selection. The available and related patterns come up for examination and testing; each, in turn, is tentatively entered upon, looked over, as it were, and either accepted or rejected, as may be. We "choose" from our patterns that which best satisfies the conditions of our problem—but we have *seen* the others, and we believe that we might just as easily have chosen differently. Our ego, we feel, has simply exhibited its own natural privilege.

But what really determines selection in the nerve flow? Why did it not, for instance, enter the first pattern it came to? Watch a stream of water making its way over new ground, and see how it enters upon the various possibilities which offer, and see how it *seems* to select from these the most promising. The flow of nerve force is a physiological activity, and it is true to the general law governing all activity in that it must follow the path of least resistance—it follows here the channels of association that are best marked. Then there is another law here involved, the physiological law that easy functioning has a pleasure value. Resistance brings discomfort and even pain. After a hearty meal, a good digestion yields a sense of luxury—a poor digestion, something else. A

habit is easy, and pleasant because easy—the breaking of a habit is painful. The Parthenon is pleasing because its perspective is adjusted to the mechanics of the external muscles of the eye. The completion of all physiological acts normally brought to their goal brings relaxation and comfort. It is so with the mental processes, which, whatever we may think of their origin, are certainly physiological in expression.

As to the organic character of the check to the nerve current, as to the organic property which makes one pattern compatible and another not, no man can now say. We know little of the physical and chemical changes in a neuron, brought about by its activity, we know merely that some changes occur. We are as yet baffled in our search for the ultimate molecular explanation—but we do know surely some of the secondary phenomena, and these are not trivial. We know that the Will lies, physiologically, in the activity of certain brain cells—in groups of cells which, for convenience, we call patterns—and we know that this activity is a product of the blood supply and of stimulation. We know, too, that the gland secretions are also here involved, and that, in consequence, we have as a background, to at least many of our mental reactions, some body desire or emotion—that which the traditionalists and idealists often call “end” or “purpose.” Desire, and a physiological functioning in harmony with it—this is as far as we can now go. The nerve currents follow the channels of least resistance, and find their satisfaction in unobstructed flow—when they can enter a pattern without effort the circuit from desire to action is at once happily completed, and this pattern then becomes “true.” Where desire comes into conflict with experience or reason, where, in other words, old patterns conflict with new, then the decision follows a balancing—all patterns pertaining to the problem, both of body and of mind, are placed on the pans, and the decision is determined by their position.¹

It may be objected that I am dealing here with judgment rather than with the will, but the process is the same. To borrow an illustration from M. Coué, any one can walk a six-inch plank, but elevate this plank sufficiently and its walking becomes a feat—the motor patterns of walking (the will-to-walk) may be here outweighed by the other patterns now brought into play.

¹ The concept of a balance carries with it, of course, that of a balancer—we need someone to hold the balance, and a someone, the same or another, to put on the weights. This old and familiar metaphor is used here, for its simplicity. It is easier to picture determinism under this figure than in the physiological form above adumbrated. Selection by the physiological hypothesis, be it remembered, does not require an outside guidance, it requires only a law—as in the case of the stream of water finding its way over new ground.

Where is the freedom of choice in these cases? The conditions of our problems are obviously set for us by forces external to our ego, and our patterns are set for us by our experience. Whether all or but part of our patterns shall come into play is determined for us by physiological considerations, and, in either case, the conclusion reached is but the algebraic sum of the contents of those functioning.

What about the prediction of behavior? Had man a free will there would be no prediction possible—and yet we know that, given some of the data, we are tempted always to essay a prediction. We say, "I believe this man will do—so-and-so." Or, "I believe he did this because of—so-and-so." We recognize, in other words, the existence of cause and effect—the very essence of determinism—and we recognize it no matter what our particular theory of the Will may be. We take pleasure in a well-written and well-acted play because we recognize that the players are acting true to form, true to our reasonable expectations, or true to our estimate of the possibilities. We have recognized the stimuli and we have discounted the responses. Still, no man's actions are absolutely predictable. Make the physiological explanation as complete as we may, and an uncertainty of final response must remain. And in this fact, in this element of uncertainty, there lies that which further strengthens our sense of the Will. We have expectation—the result of the possibility of prediction—and we have doubt—the result of its uncertainty. What then will the man do? Well, it is apparently up to the man to decide.

And then consider error. To err is human—it is, moreover, rather characteristically human. Man has departed from those simple instinctive reactions which guide the individual truly, and has not yet, in his new social life, attained to an efficient substitute. The argument, then, which has been made for free will as against determinism on the basis of man's adaptability, must fail. This adaptation nature has accomplished far better on a lower plane. Adaptation is an argument *for* determinism. An argument against might indeed be based on man's errors, but even this would be weak—man does not make errors enough, and such as he does make are easily explained by his lack of experience, by conflict of stimuli, by the artificiality of his social surroundings, and by those changes in condition which so often convert habitual actions, once learned as good, into things harmful.

Uncertainty of response is derived from many sources. We have, first of all, the uncertainty as to the nature of the patterns carried—

uncertainty as to what data the man has accumulated. Then there is the uncertainty as to the strength of the patterns and their associations—the physiological health determining whether or not a pattern once formed shall remain easily recoverable. There is, thirdly, the fact that many of the patterns lie in the unconscious mind, and are never really consciously available at all. And there is, finally, the uncertainty of the body influences, the physiological desires, the emotions, their strengths and the degree of their control. Slipshod thinkers, lacking nerve vitality, or, which may be the same thing, having glandular errors which prevent the normal excitation of the nerve centers, are content to accept as the completion of the nerve flow anything that “will do”; they do not possess the energy to go on with the process to its normal end—their nerve impulses die out just as do their muscular. And then there are those others, of an impetuous nature, who rush to their decisions and to action. In these, the motor centers, the brain centers from which originate the impulses resulting in action, are unduly sensitive and too easily set going; they can not wait for the result of the completed nerve circuit, but act on the slightest provocation. The first pattern entered is “touched off,” as it were, though it may later be recognized to have been a wrong one. Quick decisions are by no means an evidence of mental worth—they may be the reverse, an evidence of instability and weakness. Our intelligence tester should consider this.

Again I ask—where is our freedom of choice? However we regard our problem, we meet physiological factors, factors, moreover, often determined by elements of the body life far removed from the brain. There is the registered brain pattern, dependent for its existence and usefulness, not only upon opportunity, but also upon the organic properties and health of the nerve cells and their functioning; there is the perfection of the nerve associations, upon which the memory depends; there is the temperament, a matter of the glands; and there is, finally, governing the whole, the general body health. Does it not seem that a man's actions must be determined for him by a “resolution” of organic forces? If we could but know all the forces, and know, too, their relative strength, then we could calculate behavior just as surely as we can the path which a ball will take when the forces acting upon it are all known; but the fact is, in man, we can but guess at the forces, and man's actions, therefore, must remain, as has been said, unpredictable. Consider an example from one phase of “will” action. Force *A*, we will say, is a physiological desire derived from some body need. Force *B* is a social convention. Force *C* is a memory of one's mother. A prob-

lem presents to which all of these patterns are pertinent—what will the man do? Shall *A* sweep all before it with an overwhelming of *B* and *C*? Or shall *A* and *B* alone arise, and the decision be arrived at by their relative weight—or shall the balance be between *A* and *C* only? Suppose a case where *A* and *B* have first come to the fore and *A* has outweighed *B*, there is still the chance that *C* may later come into action and the balance thereby be reversed. Consider the remorse which follows the first case, where *A* has overwhelmed *B* and *C*—with the satisfaction of the dominant *A* and its consequent removal, *B* and *C* become in their turn overwhelming. One could make many variations with but three forces, but suppose, as would be nearer the case, that there were a thousand distinct and indistinct patterns all more or less related—who then would venture a prediction?

What becomes of responsibility should we accept this physiological control of our thoughts? Now it is not unfair to doubt whether those who ask this question are always interested in responsibility, *per se*; it is at least possible that they are more often concerned with the protection of their ego—but still, the necessity for responsibility is repeatedly urged. In the first place, what do we mean by responsibility? Is it the social or the individual, the legal or the ethical attitude that is in question? Disputants frequently argue with a fatal confusion of premises here. As it seems to the writer, there is in this physiological hypothesis a great responsibility, responsibility in all its several kinds. In the laying down of the patterns which are later to be our controls, it is culture, environment, education, the social ideals, hygiene and climate, food and body care which are the formative agents. Inheritance is part, but inheritance cares rather for the primitive tendencies, all the rest are really of the environment. Note the responsibility here of those who have power over environment, and note the *social* obligation. On the other hand, individual responsibility, a responsibility before the law, is equally imperative if society is to continue. No determinism, not even fatalism, can alter the fact that a man's act are *his* acts whatever may have been their origin. The Greek tragedians have well emphasized this. What interests society first of all is the question whether a man is fit to consort with, whether he is a social asset or only a liability. But note, too, that a man's legal responsibility, at least through obedience to the higher uncoded law, brings him also into touch with the group's moral responsibility. It is not sufficient for the social man to keep out of trouble, he must also share in the group's activities. He must share in the moral obligations of the

group even though he as an individual is himself controlled only by law. Socialism is now trying to codify these social attitudes.

In other words, with the individual and society there is a mutual accountability—duties of each to the other; a legal valuation of the individual according to the part he plays in the group, and a moral valuation of society according to its care of its members.

The moral responsibility, then, by this hypothesis, lies fundamentally with the group—and it lies, it must be seen, primarily in the training of the child. It is with childhood that society's opportunity comes, and it is with the child that its first duty lies. The child must be so developed that such patterns as are useful to itself and to others shall be laid down and made real. Useful patterns must be instilled into the child and made so prominent that they shall arise on all occasions when action is called for. A "strong will" is a matter of irresistible brain patterns—let all such be made good ones. Patterns of truth, honor and duty, for example should be made so vital that they shall be ever in the foreground of thought, and ready always to throw their weight in the making of decisions—when once so strong as to permit of no conscious conflict, then we have that best of all social men, the man of honor.

It has pleased certain critics of determinism to declare that it negatives the need for education. Is it not evident that it does just the reverse? It makes education not only hopeful, but possible! There could be no teaching of a truly wilful child, but if a child is swayed by the patterns he carries, then we can certainly teach him by altering and adding to these patterns. Consider the fact, already referred to, that many of the patterns which aid in the forming of decisions lie in the background of thought, below the threshold of consciousness. Such may never rise into consciousness at all, but they have their full influence for all that. Out of the vast storehouse of the unconscious, the weights are piled on one pan or the other of man's balance of thought all unknown to the man—the Will has been defined, even as the urge of the unconscious. Consider child-training in this connection. Childhood is the period above all others for the storing of the subconscious mind. Into this, each day, each hour, each moment pass experiences and perceptions, understood, misunderstood, and not understood, and even not noticed. Good, bad, and indifferent are all put away—to be "forgotten, maybe, but never to lose their thought-influencing power. Is instruction then useful? Rather, let us ask, is there anything that can be conceived of which is of equal importance, not only to the child, but, since the child is the father of the next generation, to all mankind?

I have spoken of the patterns of truth, honor and duty as being possible and necessary of production in the child. As a matter of fact, these already exist in potential in all normal children from birth—but in potential only, note, not ready for use: they need, as I have said to be cultivated. These are abstracts, composites derived from experience—the child can not grasp them as realities—but there is a racial experience as well as a personal, and it is through this that the child is prepared. Repeated experiences, each with something in common, can not come to man over and over again through the long history of the race without leaving their mark. In each individual, even the dullest, there must have been gradually laid down a potential complex of patterns representative of the race's experience, and the foundation, therefore, of its abstract conceptions. In any one individual these conceptions may remain, it is true, forever vague and nameless, but they exist in all and can generally be aroused to consciousness. It is in these abstracts, derived from the racial experience of what is good and bad that I would place "Conscience"—that indefinable feeling which refuses to take form, which has no words, but which is, nevertheless, always with us. Influences in the field of consciousness are intellectual; those which do not rise into consciousness we do not know, we just feel.

And here is the very last stand of man's egoism, the last strong tower of the citadel of his personality, in its turn assailed. Some have offered to sacrifice Will if they may only be left with a conscience. They have been willing to grant that a man's thought and act in the intellectual field might be determined by physiological causes, but the conscience, as a control of the moral act, they have claimed as his very soul. Must this claim be respected? Moral acts, both etymologically and historically, are but such as are in accordance with the *mores*. They are but the expression of the group's patterns of experience, and they vary with the group.

It may be felt that I have placed the Conscience in a region of the mind that is not over-clean. Freud has told us of an Unconscious that is black with primitive desire. Let me offer a one-line criticism of Freud. Man thinks with his brain, but the material for his thought is variously obtained. Freud's Unconscious is, to me, outside of the mind altogether; it consists of impulses conveyed to the mind from the body, of extra-cerebral impulses which may even antedate the mind's formation, and which the mind now merely translates.

Let us look at our problem from this standpoint. From the body rise desires; from both the conscious and the unconscious mind rise

patterns of ideas. The three groups are, or may be, thrown into conflict; a struggle takes place, and, if this be on the conscious plane then we say that our Will is being exercised, that we are making a choice. What we are really doing is watching a fight, and stand ready to acclaim the victor. If the desire wins out, we boast of our vigor; if it is the conscious idea, we boast of our intellect; if it is the unconscious ideal, then we boast of our conscience. When a man speaks of his conscience as "preventing," his language is truer than his thought. He thinks that he is here expressing a moral choice, but this is not so, his conscience did truly prevent—the weight of the stored traditions of his group has outweighed and prevented any contrary action.

Does determinism detract from man's dignity? This is a small matter scientifically, but it is not unimportant as regards acceptance of the idea. Well, determinism would at first sight seem to insult man's vanity—there would be but little opposition otherwise—but that it takes from his dignity is by no means so evident. As Doctor MacCunn has said: "Nor will our triumphs of self-control, if we be fortunate enough to achieve such, be the less welcome, if in the moment of conscious victory we think with gratitude of the men, the institutions, and the slowly-fashioned, deeply-cherished ideals that have given our resolves and aspirations that habitual well-compacted coherency, that deep root in our moral being, in which lies the open secret of their power." I do not know that the Doctor would thank me for quoting him in this article, but what he says seems peculiarly apt. Looked at rightly, not only does determinism leave us with pride, but it protects even our vanity, at least the vanity of possession.

But is the idea intellectually acceptable? Said Francis Howell, in 1824, "The World of Mind is to be studied as the World of Matter—under the influence of that one motive which alone is the proper incitement of philosophical labour, namely, the purely intellectual desire to know." Let us carry our thought to its logical conclusion. We arrive, I believe, not at pessimism, as the critics declare, but at something which indeed to our present habits of mind seems sadly uninspiring. For example: We may say, if we please, that we will take an objective attitude towards life, and do and strive to the best of our ability—leaving all these problems to the peace-disturbing scientists—but, as a matter of fact, we will do exactly as our patterns lead us. We will strive if our striving patterns be stronger than those which would lead us to indolence; we will engage in education if our patterns so direct, in child-training or what-not—or,

we will give ourselves over to this present disturbing inquiry, if this last should be what is ordered.

But suppose that determinism be true—will the knowledge of it do harm? I can not believe that truth can do harm. It would be a pitiful state of affairs were we to find that we must live on an idealism that is false; that in order to get on we must “josh” ourselves with egoistic flattery. But is it true? Ay! There is the rub! However, let us assume it to be true. Will man slump and do nothing under the influence of a deterministic belief? That depends, once more, upon his patterns—he will slump if his slumping patterns are dominant. On the other hand, however, he will continue to strive and make effort and do all that is noble, if these are the patterns that are weightiest. Queer, is it not? The only case where I can conceive of harm being done by the acceptance of determinism is where the good patterns, the duty patterns, are so weak that the trifling addition of this one new intellectual pattern will be sufficient to throw the balance against them. And, when you think it over, the possessor of such weak duty patterns is of but small importance anyway.

When one gets to this point in the inquiry, one is about ready once more to return to the traditional idealistic attitude. We are now ready—our patterns permitting—to drop the whole subject and to declare it a delusion. But is no compromise possible? May it not be that Determinism and Free-Will stand opposed only when regarded as exclusive controls?

Truth lies often in compromise—the ordinary teaching has well-nigh ruined the church, and it sometimes threatens even science—Aristotle was right, logical conclusions are generally absurd. Let us but recognize, as all must, that there is pervading the universe and ourselves a power which, at least as yet, surpasses our understanding. We need not be over-anxious as to the effects of determinism. Nature, to the man of science is neither cruel nor beneficent—but it has a divine order which is compelling of confidence. Law, to the man of science, offers a far better solution to the Problem of Job than does theology. The thought of the helpless, of the idiot, of the insane, would seem to proclaim aloud the truth of determinism. Science offers a law—he who obeys it fares well; he who defies it must suffer. Theology offers—Eve and her apple.

On the other hand, science, for its part, must not balk over-hastily at spiritual interpretations. These are outside of science, but that does not mean that they are necessarily false. Even science itself is founded on hypotheses—there is no exact knowledge. Geom-

etry begins with unprovable axioms and postulates. An axiom is merely that which has as yet found no contrary pattern to combat it—the path down which science has traveled through the ages is fairly strewn with the *débris* of axioms.

Why not, then, add one more hypothesis? Why not, if it helps us, consider the ultimate Will as Life itself, as part of the Infinite Will—writing this last in “lower case” or in capitals as our taste may incline us? If we choose to do this—if our patterns so direct—then we are also at full liberty to retain the deterministic explanation of the Will’s operation. The logical conclusions which seem so absurd are, after all, remember, only such as are derivable from the imperfect data now possessed. As men of science know, but sometimes forget, it would be utterly unscientific to claim for our knowledge any completeness. We guess that we have attained to but a trifling part of even the material facts now available—what lies beyond is known to neither university nor church.